



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

: Attn: APPLICATION BRANCH

Takashi KOMAI et al.

: Docket No. 2003-1593A

Serial No. 10/697,878

:

Filed October 31, 2003

:

NOVEL ANTICOAGULANT

:

THE COMMISSIONER IS AUTHORIZED  
TO CHARGE ANY DEFICIENCY IN THE  
FEE FOR THIS PAPER TO DEPOSIT  
ACCOUNT NO. 23-0975.

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to the provisions of 37 CFR 1.56, 1.97 and 1.98, Applicants request consideration of [X] the references listed on attached form PTO-1449 and/or [] the additional information identified below in paragraph 3. A legible copy of each reference listed on the form PTO-1449 is enclosed.

1a. [X] This Information Disclosure Statement is submitted:

within three months of the filing date (or of entry into the National Stage) of the above-entitled application, **or**

before the mailing of a first Office Action on the merits or the mailing of a first Office Action after the filing of an RCE,

**and thus no certification and/or fee is required.**

1b. [] This Information Disclosure Statement is submitted

after the events of above paragraph 1a and prior to the mailing date of a final Office Action or a Notice of Allowance or an action which otherwise closes prosecution in the application, and thus:

(1) ☐ the certification of paragraph 2 below is provided, **or**

(2) ☐ the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.

1c. ☐ This Information Disclosure Statement is submitted:

after the mailing date of a final Office Action or Notice of Allowance or action which otherwise closes prosecution in the application, and prior to payment of the issue fee, and thus:

**the certification of paragraph 2 below is provided, and**

**the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.**

2. It is hereby certified

a. ☐ that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Statement, or

b. ☐ that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of the Statement.

3. ☐ Consideration of the following list of additional information (including any copending or abandoned U.S. application, prior uses and/or sales, etc.) is requested.

4. For each non-English language reference listed on the attached form PTO-1449, reference is made to:

a. ☐ a full or partial English language translation submitted herewith,

b. ☐ a foreign patent office search report (in the English language) submitted herewith,

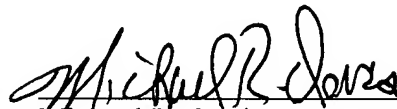
- c. ☐ the concise explanation contained in the specification of the present application at page,
- d. ☐ the concise explanation set forth in the attached English language abstract,
- e. ☐ the concise explanation set forth below or on a separate sheet attached to the reference:
5. ☐ A foreign patent office search report citing one or more of the references is enclosed.
6. ☒ Comments:

The US '651 reference cited on the attached PTO-1449 form corresponds to the WO '383 reference cited on this form.

Respectfully submitted,

Takashi KOMAI et al.

By:



Michael R. Davis

Registration No. 25,134

Attorney for Applicants

MRD/pth  
Washington, D.C. 20006-1021  
Telephone (202) 721-8200  
Facsimile (202) 721-8250  
January 30, 2004

FORM PTO 1449 (modified)

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)  
(Use several sheets if necessary)

Date Submitted to PTO: January 30, 2004

ATTY DOCKET NO.  
2003-1593ASERIAL NO.  
10/697,878APPLICANT  
Takashi KOMAI et al.FILING DATE  
October 31, 2003

GROUP

## U.S. PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	4,303,651	12/1981	Lindahl et al.			
	AB	4,847,338	7/1989	Linhardt et al.			
	AC						

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	AD	80/01383	7/1980	WO			
	AE						

## OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

	AF	Keiichi Miyamoto, et al., "Preparation of gellan sulfate as an artificial ligand for removal of extra domain A containing fibronectin", International Journal of Biological Macromolecules, 28, 381-385, 2001.
	AG	Keiichi Miyamoto et al., "Immobilized gellan sulfate surface for cell adhesion and multiplication: development of cell-hybrid biomaterials using self-produced fibronectin", International Journal of Biological Macromolecules, 30, 75-80, 2002.
	AH	Keiichi Miyamoto, et al., "Novel plasma-separation dilayer gellan-gellan-sulfate adsorber for direct removal of extra domain A containing fibronectin from the blood of rheumatoid arthritis patients", International Journal of Biological Macromolecules, 30, 197-204, 2002.
	AI	Hiroyuki Yamamoto et al., "Preparation of Polyion Complex Capsule and Fiber of Chitosan and Gellan-Sulfate at Aqueous Interface", Bull. Chem. Soc. Jpn., 76, 2053-2057, 2003.
	AJ	Toshihiko Toida, et al., "Structure and Bioactivity of Sulfated Polysaccharides", Trends in Glycoscience and Glycotechnology, 15, 29-46, 2003.
	AK	M. M. Samama et al., "New Data on the Pharmacology of Heparin and Low Molecular Weight Heparins", Drugs, 52, 8-15, 1996.
	AL	

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of form with next communication to applicant.